

REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT

Date: July 28, 2015

Project Name & Number: Water Distribution Supervisory Control and Data Acquisition (SCADA) Improvements – Investigation Phase; Project No. 14-2218 **CIP #:** 51067

Project Description: Replacement or upgrade of the Water Distribution SCADA used to monitor and control the water distribution system.

Consultant: Dakota Pump, Inc.

Original Contract Amount: \$125,996.00	Original Contract Date: August 3, 2015	Original Completion Date: January 29, 2016
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Addendum No:


Amendment Description:

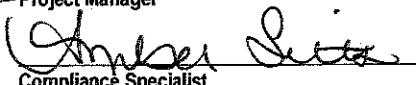
Current Contract Amount: _____	Current Completion Date: _____
Change Requested: _____	
New Contract Amount: _____ \$0.00	New Completion Date: _____

Funding Source This Request:


Amount	Dept.	Line Item	Fund	Comments
\$125,996.00	933	4225	602	Water Replacement / Improvements
\$125,996.00	Total			

Agreement Review & Approvals

 7/16/15
Project Manager Date

 7/17/15
Compliance Specialist Date

City Attorney Date

 7-17-15
Division Manager Date

Department Director Date

ROUTING INSTRUCTIONS

Route **two** originals of the Agreement for review and signatures.
 Finance Office - Retain one original
 Project Manager - Retain second original for delivery to Consultant
 cc: Public Works
 Engineering
 Project Manager

FINANCE OFFICE USE ONLY

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

	Date	Initials	Approved
Appropriation	7/21/15	[Signature]	Y N
Cash Flow			Y N

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**Agreement Between City of Rapid City and Dakota Pump, Inc.
for Professional Services for the Water Distribution Supervisory Control and Data
Acquisition (SCADA) Improvements Investigation Phase, Project No. 14-2218 /
CIP No. 51067**

AGREEMENT made August 3, 2015, between the City of Rapid City, SD (City) and Dakota Pump, Inc., (Contractor), located at 25524 413th Ave., Mitchell, SD 57301. City intends to obtain services for Water Distribution Supervisory Control and Data Acquisition (SCADA) Improvements Investigation Phase, Project No. 14-2218, CIP No. 51067. The scope of services is as described in Exhibits A and B.

The City and the Contractor agree as follows:

The Contractor shall provide professional services for the City in all phases of the Project as defined in Exhibits A and B

Section 1—Basic Services of Contractor

1.1 General

1.1.1 The Contractor shall perform professional described in this agreement. Contractor intends to serve as the City's professional representative for those services as defined in this agreement and to provide advice and consultation to the City as a professional. Any opinions of probable project cost, approvals, and other decisions provided by Contractor for the City are rendered on the basis of experience and qualifications and represent Contractor's professional judgment.

1.1.2 All documents including Drawings and Specifications provided or furnished by Contractor pursuant to this Agreement are instruments of service in respect of the Project and Contractor shall retain an ownership therein. Reuse of any documents pertaining to this project by the City on extensions of this project or on any other project shall be at the City's risk. The City agrees to defend, indemnify, and hold harmless Contractor from all claims, damages, and expenses including attorney's fees arising out of such reuse of the documents by the City or by others acting through the City.

1.2 Scope of Work

The Contractor shall:



- 1.2.1 Consult with the City, other agencies, groups, consultants, and/or individuals to clarify and define requirements for the Project and review available data.
- 1.2.2 Perform the tasks described in the Scope of Services. (See Exhibits A and B.)
- 1.2.3 Conduct a survey of the Project to the extent deemed necessary to provide adequate site information.

Section 2—Information Provided by City

The City will provide any information in its possession for the project at no cost to the Contractor.

Section 3—Notice to Proceed

The City will issue a written notification to the Contractor to proceed with the work. The Contractor shall not start work prior to receipt of the written notice. The Contractor shall not be paid for any work performed prior to receiving the Notice to Proceed.

Section 4—Mutual Covenants

4.1 General

- 4.1.1 The Contractor shall not sublet or assign any part of the work under this Agreement without written authority from the City.
- 4.1.2 The City and the Contractor each binds itself and partners, successors, executors, administrators, assigns, and legal representatives to the other party to this agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, regarding all covenants, agreements, and obligations of this agreement.
- 4.1.3 Nothing in this agreement shall give any rights or benefits to anyone other than the City and the Contractor.
- 4.1.4 This agreement constitutes the entire agreement between the City and the Contractor and supersedes all prior written or oral understandings. This agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.



- 4.1.5 The Contractor shall make such revisions in plans which may already have been completed, approved, and accepted by the City, as are necessary to correct Contractor's errors or omissions in the plans, when requested to do so by the City, without extra compensation therefore.
- 4.1.6 If the City requests that previously satisfactorily completed and accepted plans or parts thereof be revised, the Contractor shall make the revisions requested by the City. This work shall be paid for as extra work.
- 4.1.7 The City may at any time by written order make changes within the general scope of this Agreement in the work and services to be performed by the Contractor. Any changes which materially increase or reduce the cost of or the time required for the performance of the Agreement shall be deemed a change in the scope of work for which an adjustment shall be made in the Agreement price or of the time for performance, or both, and the Agreement shall be modified in writing accordingly. Additional work necessary due to the extension of project limits shall be paid for as extra work.
- 4.1.8 Extra work, as authorized by the City, will be paid for separately and be in addition to the consideration of this Section.
- 4.1.9 For those projects involving conceptual or process development services, activities often cannot be fully defined during the initial planning. As the project does progress, facts and conditions uncovered may reveal a change in direction that may alter the scope of services. Contractor will promptly inform the City in writing of such situations so that changes in this agreement can be renegotiated.
- 4.1.10 This Agreement may be terminated (a) by the City with or without cause upon seven days' written notice to the Contractor and (b) by the Contractor for cause upon seven days' written notice to the City. If the City terminates the agreement without cause, the Contractor will be paid for all services rendered and all reimbursable expenses incurred prior to the date of termination.
- If termination is due to the failure of the Contractor to fulfill its agreement obligations, the City may take over the work and complete it. In such case, the Contractor shall be liable to the City for any additional cost to the extent directly resulting from Contractor's action.
- 4.1.11 The City or its duly authorized representatives may examine any books, documents, papers, and records of the Contractor involving



transactions related to this agreement for three years after final payment. All examinations will be performed at reasonable times, with proper notice. Contractor's documentation will be in a format consistent with general accounting procedures.

- 4.1.12 The City shall designate a representative authorized to act on the City's behalf with respect to the Project. The City or such authorized representative shall render decisions in a timely manner pertaining to documents submitted by the Contractor in order to avoid unreasonable delay in the orderly and sequential progress of the Contractor's services.
- 4.1.13 Costs and schedule commitments shall be subject to renegotiation for delays caused by the City's failure to provide specified facilities or information or for delays caused by other parties, excluding sub-contractors and sub-consultants, unpredictable occurrences including without limitation, fires, floods, riots, strikes, unavailability of labor or materials, delays or defaults by suppliers of materials or services, process shutdowns, acts of God, or the public enemy, or acts of regulations of any governmental agency or any other conditions or circumstances beyond the control of the City or Contractor. Temporary delays of services caused by any of the above which results in additional costs beyond those outlined may require renegotiation of this agreement.
- 4.1.14 The City will give prompt written notice to the Contractor if the City becomes aware of any fault or defect in the Project or nonconformance with the Project Documents.
- 4.1.15 Unless otherwise provided in this Agreement, the Contractor and the Contractor's consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos products, polychlorinated biphenyl (PCB), or other toxic substances.
- 4.1.16 In the event asbestos or toxic materials are encountered at the jobsite, or should it become known in any way that such materials may be present at the jobsite or any adjacent areas that may affect the performance of Contractor's services, Contractor may, at their option and without liability for consequential or any other damages, suspend performance of services on the project until the City retains appropriate specialist consultant(s) or contractor(s) to identify, abate, and/or remove the asbestos or hazardous or toxic materials.



4.1.17 Contractor hereby represents and warrants that it does not fail or refuse to collect or remit South Dakota or City sales, use or excise tax for transactions which are taxable under the laws of the State of South Dakota.

4.2 City of Rapid City NonDiscrimination Policy Statement

In compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination act of 1975, the Americans with Disabilities Act of 1990, and other nondiscrimination authorities it is the policy of the City of Rapid City, 300 Sixth Street, Rapid City, SD 57701-5035, to provide benefits, services, and employment to all persons without regard to race, color, national origin, sex, disabilities/handicaps, age, or income status. No distinction is made among any persons in eligibility for the reception of benefits and services provided by or through the auspices of the City of Rapid City.

Contractor will permit access to any and all records pertaining to hiring and employment and to other pertinent data and records for the purpose of enabling the Commission, its agencies or representatives, to ascertain compliance with the above provisions.

This section shall be binding on all subcontractors or suppliers.

Section 5—Payments to the Contractor

5.1 Fee

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed \$125,996.00 unless the scope of the project is changed as outlined in Section 4. If expenses exceed the maximum amount, the Contractor shall complete the project as agreed upon here without any additional compensation.

5.2 Progress Payments

Monthly progress payments shall be processed by the City upon receipt of the claim as computed by the Contractor based on work completed during the month and approved by the City.

Net payment to the Contractor shall be due within forty-five (45) days of receipt by the City.

Section 6—Completion of Services

The Contractor shall complete services on or before January 29, 2016 based on a Notice to Proceed date of August 10, 2015.



Section 7—Insurance Requirements

7.1 Insurance Required

The Contractor shall secure the insurance specified below. The insurance shall be issued by insurance company(s) acceptable to the City and may be in a policy or policies of insurance, primary or excess. Certificates of all required insurance including any policy endorsements shall be provided to the City prior to or upon the execution of this Agreement.

7.2 Cancellation

The Contractor will provide the City with at least 30 days' written notice of an insurer's intent to cancel or not renew any of the insurance coverage. The Contractor agrees to hold the City harmless from any liability, including additional premium due because of the Contractor's failure to maintain the coverage limits required.

7.3 City Acceptance of Proof

The City's approval or acceptance of certificates of insurance does not constitute City assumption of responsibility for the validity of any insurance policies nor does the City represent that the coverages and limits described in this agreement are adequate to protect the Contractor, its consultants or subcontractors interests, and assumes no liability therefore. The Contractor will hold the City harmless from any liability, including additional premium due, because of the Contractor's failure to maintain the coverage limits required.

7.4 Specific Requirements

7.4.1 Workers' compensation insurance with statutory limits required by South Dakota law. Coverage B-Employer's Liability coverage of not less than \$500,000 each accident, \$500,000 disease-policy limit, and \$500,000 disease-each employee.

7.4.2 Commercial general liability insurance providing occurrence form contractual, personal injury, bodily injury and property damage liability coverage with limits of not less than \$1,000,000 per occurrence, \$2,000,000 general aggregate, and \$2,000,000 aggregate products and completed operations. If the occurrence form is not available, claims-made coverage shall be maintained for three years after completion of the terms of this agreement. The policy shall name the City and its representatives as an additional insured.



- 7.4.3 Automobile liability insurance covering all owned, nonowned, and hired automobiles, trucks, and trailers. The coverage shall be at least as broad as that found in the standard comprehensive automobile liability policy with limits of not less than \$1,000,000 combined single limit each occurrence. The required limit may include excess liability (umbrella) coverage.

Section 8—Hold Harmless

The Contractor hereby agrees to hold the City harmless from any and all claims or liability including attorneys' fees arising out of the services furnished under this Agreement, and for bodily injury or property damage arising out of services furnished under this Agreement, providing that such claims or liability are the result of a negligent act, error or omission of the Contractor and/or its employees/agents arising out of the services described in the Agreement.

Section 9—Independent Business

The parties agree that the Contractor operates an independent business and is contracting to do work according to his own methods, without being subject to the control of the City, except as to the product or the result of the work. The relationship between the City and the Contractor shall be that as between an independent contractor and the City and not as an employer-employee relationship. The payment to the Contractor is inclusive of any use, excise, income or any other tax arising out of this agreement.

Section 10-Controlling Law and Venue

This Agreement shall be subject to, interpreted and enforced according to the laws of the State of South Dakota, without regard to any conflicts of law provisions. Parties agree to submit to the exclusive venue and jurisdiction of the State of South Dakota, 7th Judicial Circuit, Pennington County.

Section 11-Severability

Any unenforceable provision herein shall be amended to the extent necessary to make it enforceable; if not possible, it shall be deleted and all other provisions shall remain in full force and effect.

Section 12—Funds Appropriation

If funds are not budgeted or appropriated for any fiscal year for services provided by the terms of this agreement, this agreement shall impose no obligation on the City for payment. This agreement is null and void except as to annual payments herein agreed upon for which funds have been budgeted or appropriated, and no right of action or



damage shall accrue to the benefit of the Contractor, its successors or assignees, for any further payments. For future phases of this or any project, project components not identified within this contract shall not constitute an obligation by the City until funding for that component has been appropriated.

Section 13-Responsibility of Contractor

General Responsibility: The Contractor shall furnish all transportation, ways, works, machinery, and plant, and all suitable appliances required for the safe, proper, and lawful construction, maintenance, and use thereof. The Contractor shall be fully responsible for the materials and equipment used for the work and for safeguarding the work against damage or destruction until its final acceptance by the City. The Contractor agrees to make no claims for damage to the work prior to final acceptance and will make no claims for damage to the materials except through negligence or willful act of the City.

Before the completion and acceptance of this Contract shall be made good by him, he shall be solely answerable for all damage to the City or the property of the City; to other contractors, or other employees of the City; to the neighboring premises or to any private or personal property due to improper, illegal, or negligent conduct of himself or his subcontractors; employees or agents in and about said work or in the execution of the work covered by this Contract or any extra work undertaken herein provided; or to any defect in, or the improper use of, any scaffolding, shoring, apparatus, ways, works, machinery or plant. He shall indemnify and save harmless the City and its officers and agents from all claims relating to labor, materials, and methods used in executing the work.

Section 14-Patents

It is further agreed that all royalties for patents or patent infringement claims, whether such patents are for processes or devices, that might be involved in the construction or use of the work, shall be included in the Contract amount and the Contractor shall satisfy all demands that may be made at any time for such, and shall be liable for any damages or claims for patent infringements; and the Contractor shall, at his own expense, defend any and all suits or proceedings that might be instituted at any time against the City for infringement or alleged infringement of any patent or patents involved in the work; and in case of an award of damages, the said Contractor shall pay such award; final payment to the Contractor by the City will not be made while any such suits or claims remain unsettled.



Section 15-Indemnity

The Contractor shall indemnify and save harmless the City from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought or recovered against him, by reason of any act or omission of the said Contractor, his agents or employees, in the execution of the work or in the guarding of it and this shall include acts or omission of subcontractor.

The Contractor shall, and is hereby authorized to, maintain any part for such insurance, issued in the name of the City, as will protect the City from his contingent liability under this Contract, and the City's right to enforce against the Contractor any provision of this Section shall be contingent upon the full compliance by the City with the terms of applicable insurance policy or policies, a copy of which shall be deposited with the City.

Section 16-Laws and Ordinances

The Contractor shall keep himself fully informed of all existing and current regulations of the City, County, State, and Nation, which in any way limit or control the actions or operations of those engaged upon the work, or affecting the materials supplied to or by them. He shall at all times observe and comply with, all ordinances, laws, rules and regulations and shall protect and indemnify the City and the City's officers and agents against any claims or liability arising from or based on any violation of the same. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the work. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations and without such notice to the City, he shall bear all costs arising therefrom. Such performance shall constitute a waiver of any and all claims associated with the work.

Section 17-Permits and Licenses

Unless otherwise specified, permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor. Permits, licenses, and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the City, unless otherwise specified.

make, the aforesaid repairs; providing, however, that in case of an emergency, where in the judgment of the City, delay would cause serious loss or damage, repairs may be made without notice being sent to the Contractor and the Contractor shall pay the cost thereof.



IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

City of Rapid City:

Dakota Pump, Inc.:

MAYOR

James A. Schubert

DATE: _____

DATE: 07/15/2015

ATTEST:

FINANCE OFFICER

Reviewed By:

Dan Coon
Dan Coon, OPERATIONS MANAGEMENT ENGINEER

DATE: 7/16/15

CITY'S DESIGNATED PROJECT
REPRESENTATIVE

NAME: Dan Coon
PHONE: (605) 394-4154
EMAIL: dan.coon@rcgov.org

CONTRACTOR'S DESIGNATED
PROJECT REPRESENTATIVE

NAME: Quinten Shultz
PHONE: (605) 716-7505
EMAIL: controls@dakotapump.com



EXHIBIT A

City of Rapid City
Water Distribution System
Supervisory Control and Data Acquisition (SCADA) Improvements
Project No. 14-2218/CIP No. 51067
Investigation Phase

Introduction

This project shall consist of providing professional services related to the investigation, design, integration and installation of new and/or upgraded Water Distribution SCADA hardware and software components. The project will include all the necessary professional services, software, hardware, and installation services required for a new or upgraded SCADA system.

The current Water Distribution SCADA system was installed in August 1997 and hardware and software components of the system are near the end of their useful life. Many of the hardware and software components of the system are proprietary and are either no longer supported by the system provider, or are supported on a limited basis. A new or upgraded SCADA system is required to allow the water distribution operators to meet ongoing and future operational requirements.

This agreement covers the scope of work for the Investigation Phase of this project which will be used to determine the cost and schedule of the project. This Investigation Phase shall consist of an investigation and evaluation of the existing Water Distribution SCADA system. The Investigation Phase will result in documentation of the existing system conditions, options for improvements to each component of the system, recommendation for improvements, and an implementation plan detailing the chosen options and direction for implementation of the improvements.

At its discretion the City of Rapid City (City) may move forward with the Implementation Phase of the project.

Scope of Work

Task 1-Project Administration

Coordination will be handled by Dakota Pump Inc. (DPI) and delegated to Team Members as needed to satisfy the contract items. Items may include progress meetings, team collaboration, or conference calls. Ongoing scheduling and production of meeting minutes, agendas, and related documents will be provided and shared among all parties in an organized manner.

Task 2-Project Management

Project management will be handled by DPI and will include task scheduling, quality control and assurance, and sub-consultant coordination where needed. The point of contact will be James Sebert, PE. From this single point contact all related tasks will be delegated to team members as required and results scrutinized for quality, accuracy, and owner satisfaction.

Task 3 - Review the existing SCADA system documentation

Review of existing system documentation to determine completeness, shortcomings, provide familiarity with system capabilities, and desired system operating parameters. Interviews with Water Operations staff shall be conducted to supplement the documentation as needed. The City will provide all drawings, manuals, operating procedures, and other system documentation as is available.

Task 4 – Software Investigation

4.1 Software Investigation.

The current Wonderware® HMI software is a current and supportable product from Schneider Electric®. The investigation will include a review of the current system's capabilities through collaboration with the operations staff. DPI will make note of items the staff sees as needing improved or expanded functionality.

Software components to be investigated include:

- a. Graphics. SCADA Graphical screens and displayed data. (ex. Flow, Pressure, Level, Temperature, On/Off Status, etc.).
- b. Alarms. Alarm functionality relating to display, acknowledgment, notification and reset functions. This investigation into the alarms will be confined to the current software.
- c. Historical data collection and storage. DPI will review and take note of data that is currently recorded and stored. This information can be used later in deploying new SCADA software and configuring its historical database. At this time, any new data points desired by the operation staff will be noted.
- d. Historical Data Extraction and Use. Presently the City Engineering Services Division has limited access to historical data for use in hydraulic modeling. DPI will evaluate the current methods employed for data extraction and transfer, seek out new methods if available, and present pros and cons of any new methods.
- e. Reporting. DPI will review the existing capabilities with focus on quality of data, data sampling rates, and data output formatting. Input from the operations staff will provide insight into any desired changes or additions to data that is presently included in the reports run by the City.
- f. SCADA Software. DPI will research and compare two separate SCADA software solutions. Focus will be on initial software costs, ongoing support costs (yearly licensing), deployment cost estimates, and over all suitability to

the City's needs. The following software packages will be investigated and presented to the City:

1. Trihedral Engineering – VT SCADA®
 2. Invensys (Schneider Electric) – Wonderware In Touch®
- g. SCADA System Redundancy. Various options including offsite or “Cloud” backup are available from each of the software vendors mentioned above for achieving the same or increased levels of redundancy. System redundancy includes preserving all historical databases. DPI will investigate these options and their associated costs along with advantages and disadvantages of each configuration.
- h. SCADA Software PC requirements. Each SCADA software solution requires a different configuration of PC hardware and operating systems which directly affects the deployment and maintenance cost of each solution. DPI will investigate and evaluate the specific PC needs of each software vendor along with the associated costs. Based on input from CORC, a central location for the SCADA Master PC will be chosen.
- i. Operations Management System. DPI will investigate data currently collected from the SCADA system and manually entered into reports to governing agencies or reports for internal operational use. DPI will propose an operations management software solution that will be able to provide increased automation of the Water Distribution System reporting process in conjunction with the incorporation of historical data on routine staff activities. Emphasis will be placed on the need for management of repairs, maintenance, deliveries, etc.

Task 5 – Hardware and Programming Evaluation

5.1 Hardware.

A physical inspection of each system control cabinet will be performed. Below are the items included in the investigation.

- a. Overall Appearance. This pertains to both the inside and outside of the panel enclosure. DPI will record observed conditions such as corrosion, missing wire way covers, damaged or abandoned components, etc.
- b. Location Suitability. Focus will be on the environment in which the control station is installed and the NEMA rating of its enclosure. Example: excess heat can cause processor faults, excess moisture or caustic gasses can corrode terminals and printed circuits.
- c. Expansion and Migration. According to CORC Operation Staff some of the hardware in the Water Distribution SCADA System is no longer supported. This situation constitutes a liability and exposes the CORC to possible failures that are not easily or quickly recovered from. Replacement hardware will be selected and presented that will provide long term reliability and non-propriety to the extent possible with industry leading products.
- d. Communication. The Water Distribution SCADA system communicates primarily over RS232 Radio Modems operating in a FCC Licensed band and presumably using the ModBus RTU Protocol. This is a stable and time tested method of SCADA communications. Newer/faster technologies, however, are available. Options for upgraded communications will be investigated.

- e. Operator Interface Terminals (OIT). Various OIT's exist throughout the system. These terminals will be investigated as to what data points they display, settings they access, and what replacement options are advised.
- f. Hardware Removal. Hardware items no longer needed after the upgrade will be identified and documented. This equipment could include control cabinets, sensors, conduit, wiring, etc. Removal of the noted equipment will take place during the Implementation Phase.

5.2 Programming.

The programming investigation will focus on.

- a. Documentation of currently monitored and controlled I/O Points
- b. Currently available I/O points that are not monitored but are available without significant additional hardware or programming.
- c. Identification and documentation of new I/O Points needed or desired by CORC that may require additional instruments, PLC hardware, additional control logic, and Master SCADA HMI modifications.
- d. Owner identified issues related to overall system usability, such as alarm classification and acknowledgment operations, time and date stamping, and update rate of collected data.
- e. Radio System Investigation – Identify the Make, Model, and S/N of each radio in the system. Visually inspect the antenna, cable, and grounding systems. Verify the GPS location of each site relative to CORC supplied radio path information. Provide collected data to sub consultant (Larson Data Communications - Mitchell, SD). This task does not include a new path study, rather, collected data will be used to determine the need and extent of such a study as part of the Implementation Phase.

5.3 Extended Improvements and Additions.

Based on City input and DPI Team past experience, additional items that come up during the course of the Investigation Phase will be noted. These items may be simple suggestions or ideas that include very preliminary data. The intent is to bring attention to yet undetermined items and present to the City for consideration. Based on interest from and as requested by the City, the DPI Team will investigate in more detail via an owner initiated change to the Investigation Phase Scope.

Task 6- Integration of New Facilities

This task will include the integration of new or currently unmonitored facilities into the system. The task will include review of existing information on each facility, recommendations on the best way to integrate the facility into the system, and a cost and schedule to do so. The facilities are the:

- 6.1 Jackson Springs Water Treatment Plant (JSWTP) – This issue has been investigated and the City feels there is a viable solution available. DPI will confirm they agree with the proposed solution and then provide details on how the solution can be

Rapid City Water Distribution SCADA - Project No. 14-2218 / CIP No. 51067
 Exhibit B - Task Order Fee Estimate
 Dakota Pump Inc.

		Task Totals
Task 1 - Project Coordination		
1	Project Coordination	\$6,155
2	Meetings	\$6,775
3	Team Collaboration/Calls	\$5,830
4	Minutes/Agendas	\$1,010
		Task 1 Fee \$19,750
Task 2 - Project Management		
1	Project Management	\$8,025
2	Task Scheduling	\$3,670
3	Quality Control and Quality Assurance	\$5,580
4	Subconsultant Coordination	\$4,165
		Task 2 Fee \$21,440
Task 3 - Review Existing SCADA System Documentation		
1	Review Existing SCADA System Documentation/Drawings/Manuals	\$1,475
2	Determine System Capabilities	\$905
3	Determine desired system operational parameters	\$1,165
4	Interviews with Water Operations Staff	\$4,370
		Task 3 Fee \$7,915
Task 4 - Software Investigation		
4.1	PLC and HMI Software Review and Investigation	\$200
a	Graphics - SCADA Screens	\$850
b	Alarms - functionality and acknowledgements	\$600
c	Historical Data Collection and Storage	\$600
d	Historical Data Extraction and Use - new methods	\$600
e	Reporting - review current and recommend improvements	\$600
f	SCADA Software - Research and Comparison	\$490
1	1. VT SCADA	\$700
2	2. Wonderware In Touch	\$700
g	SCADA System Redundancy - Investigate offsite, cloud, etc.	\$700
h	SCADA Software PC Requirements - Needs and location	\$450
i	Operations Management System Software - repairs, maint., deliveries	\$250
		Task 4 Fee \$6,740
Task 5 - Hardware and Programming Evaluation		
5.1	Hardware - Physical Inspections at 37 sites	\$22,795
a	Overall Appearance/Condition	\$2,095
b	Location Suitability/Environment	\$1,155
c	Expansion and Migration - non-propriety/reliability	\$1,155
d	Communication - Modems/Radio	\$1,155
e	Operator Interface Terminals	\$735
f	Hardware Removal	\$1,155
5.2	Programming	\$735
a	Documentation	\$1,155
b	Current Available I/O	\$1,155
c	New I/O Points	\$1,155
d	Owner identified issues (alarms, time, date, updates)	\$1,155
e	Radio System Investigation	\$5,295
5.3	Extended Improvements and Additions	\$0
		Task 5 Fee \$40,895
Task 6 - Integration of New Facilities		
6.1	Jackson Springs Water Treatment Plant	\$1,600
6.2	North Rapid Booster Station	\$1,730
6.3	EAFB Water Meter Facility	\$1,730
6.4	Pressure Reducing Valve (PRV) Stations (5)	\$1,860
		Task 6 Fee \$6,920
Task 7 - Evaluation Report		
7.1	Evaluation Report	\$1,050
a	Descriptions of issues investigated	\$1,730
b	List of site observations, details, diagrams, photos	\$1,940
c	Recommendations for investigative tasks	\$1,860
d	Solution alternatives with budgetary costs and action items	\$2,365
e	Report revisions	\$1,620
		Task 7 Fee \$10,565
Task 8 - Implementation Plan		
8.1	Implementation Plan	\$4,225
a	Review evaluation report and create wish list for implementation	\$860
b	Assemble budgetary estimates from task 8.1a	\$1,015
c	Estimation of forwards scheduling from task 8.1a	\$1,015
		Task 8 Fee \$7,325
		DPI Total \$77,090
		AE2S Total \$44,460
Team Total		\$121,550
		\$4,446
Proj Total		\$125,996

Exhibit C

BILLING RATES

DAKOTA PUMP, INC.		
POSITION TITLE AND NAME		HOURLY BILLING RATE
Client Manager - Jim Sebert, PE		\$130.00
Controls Project Manager - Quinten Shultz		\$125.00
Controls Integrator - Andrew Ring		\$120.00
Controls Integrator - AJ Nordquist		\$120.00
Lead Panel Builder - Bruce Dejong		\$110.00
Engineering Support - Lee Kayser		\$120.00
SCADA Technician - Jordan Olson		\$110.00
AEZS, INC.		
POSITION TITLE AND NAME		HOURLY BILLING RATE
Project Manager - Ted Schultz, PE		\$175.00
Electrical Division Manager - Damon Chmela, PE		\$210.00
I&C Systems Manager - Jason Sanden		\$200.00
I&C Engineer/OpWorks/Programmer - Jarrod Vink		\$140.00
I&C Engineer/Programmer - Cullen Wells, PE		\$140.00
I&C Engineer/Programmer/Design Support - Anthony Pittman		\$140.00
Electrical Engineer/I&C Design - Jason Salber		\$140.00
I&C Design - Jason Whitesock		\$155.00
Project Manager - Greg Wierenga, PE		\$140.00
Certified Water Operator - Mike Riker		\$125.00
EXPENSES	UNIT	BILLING RATE
Transportation Vehicle	Mile	\$.65
3/4 Ton Vehicle	Mile	\$.70